



Fermi National Accelerator Laboratory

Technical Division-Machine Shop

Welder Performance Qualification Record

Welder's Name	Daniel Watkins			FNAL #	03991N	ASME #	24
Welding Process:	1st	GTAW	Type	Manual	2nd	Type	
Performed in accordance with:				Fermi WPS SS-11-001			

Joint:	Fillet:	Production Weld		Test Coupon			
Groove:	Double Welded:	Yes	No				
	Single Welded:	Metal Fused	Metal Non-Fused	Non-Metal	Open Root	Consumable Insert	
		With Solid Backing	Without Solid Backing		Square Groove Butt		

Base Metal:	Specification	SA213, Type 304/304L	TO	SA213, Type 304/304L	ASME P #8 Gpl	TO	ASME P #8, Gpl
Plate	Pipe			Tube			
Actual Thickness:	Nominal Diameter:	Actual Diameter:	Overall Diameter:		0.125" Ø		
Qualified Range:	Wt/Schedule:	Qualified Thickness Range:	Wall:		0.028"		
	Actual Thickness:	Qualified Diameter Range:	Qualified Thickness Range:		0.028"-0.056"		
			Qualified Diameter Range:		0.028" Ø Minimum		

Filler:	1 st Process		2 nd Process				
Specification:	SFA 5.9	Class:	308/308L	Specification:		Class:	
Diameter(s):	0.035" Ø			Diameter(s):			
F #:	6			F #:			
Deposit Thickness:	0.028"	Range Qualification:	0.028"-0.056"	Deposit Thickness:		Range Qualification:	

Welding Position:	If Vertical: Up —Down			
Gas (Type & Composition):	Shielding: Argon 99.99%		Root Side Backing	Argon 99.99%
Electrical Characteristics	Type Current	AC	DCEN	DCEN
	Transfer GMAW	Spray	Globular	Pulse
				Short Circuit

Visual Inspection			
Appearance:	Satisfactory	Undercut:	None Visually Observed
Piping Porosity:	None Visually Observed		

Guided Bend Test					
Specimen	Results	Type and Figure	Results	Type and Figure	Results
001: Cross Weld	Base Metal 88,200	002: Face Bend	Pass-No Visible Cracks	004: Root Bend	Pass-No Visible Cracks
		003: Face Bend	Pass-No Visible Cracks	005: Root Bend	Pass-No Visible Cracks
Test Conducted by: Exova Inc.			Lab Test #: T 017736	Date: 10/20/2010	

Radiographic Test			
Results: Satisfactory	Per ASME IX-2007		
Radiographer:	Examiner:	Test #:	Date:

Fillet Weld Test Results			
Fracture Test: (Location, Nature, and size of Crack or Tear in Specimen)			
Length of Weld:	Length of Defect:	Percent of Defect	
Macro Test: Fusion			
Appearance: Fillet Size	inch X	inch	<input type="checkbox"/> Convex <input type="checkbox"/> Concave
Test Conducted by:	Lab Test #:		

Test Verified By:	Verification #	Date:
Michael Reynolds 03993N	9102010-1-MR	9/10/2010

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of ASME IX-2007 & AWS D1.1-06 Fermi National Accelerator Laboratory	
By:	Date:
Roger Hiller 00362N	10/20/2010

Use of Fermilab Welding Procedures and Welder Qualifications for non-Fermilab work shall be at the sole risk and responsibility of the Subcontractor, and the Subcontractor shall indemnify and save Fermilab and the government harmless from any and all claims, demands, actions or causes of action, and for any expense or loss by reason of Subcontractor's and their employees possession and use of Fermilab procedures and qualifications.